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# GMO Corn and LPG: Can They Rhyme? A Statistical Sublime

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## KEYWORDS

GMO corn, Liquefied Petroleum Gas, corn production Missouri, agriculture statistics, GMO statistics, energy consumption, USDA data, Energy Information Administration, GMO correlation, LPG consumption, agricultural practices, statistical methods, correlation coefficient, unconventional linkage, agricultural energy consumption, empirical evidence, unexpected connections.

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## Abstract

This research delves into the intriguing connection between the usage of genetically modified organisms (GMO) in corn production in Missouri and the consumption of Liquefied Petroleum Gas (LPG) in Kosovo. While the link between these two seemingly disparate commodities may appear corny, our findings reveal a statistically significant relationship that is not just a-maize-ing, but also ear-resistible. Analyzing extensive data from the United States Department of Agriculture (USDA) and the Energy Information Administration, we employed rigorous statistical methods to quantify the association. The correlation coefficient of 0.9202476 and  $p < 0.01$  for the period spanning 2008 to 2021 suggests a strong and credible connection between the two variables. This correlation is truly "cornfirmed" with flying colors, leaving us in awe of the cob-nection. Our research sheds light on this unconventional linkage, offering insights into the interplay between agricultural practices and energy consumption. The implications of our findings extend beyond the lab, as they bear relevance to policymakers and stakeholders alike. So next time someone asks "What's the deal with GMO corn and LPG?" you can confidently exclaim, "Well, let me shell you a-maize-ing statistical findings!" In conclusion, this study not only provides empirical evidence of the rhyme between GMO corn and LPG, but it also highlights the possibility of uncovering unexpected connections in the agricultural and energy sectors. After all, in the world of research, sometimes the most corny associations turn out to be the kernels of truth.

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## 1. Introduction

The remarkable intersection of genetically modified organisms (GMO) in corn production and the consumption of Liquefied Petroleum Gas (LPG) in Kosovo has been a subject of much debate and speculation, prompting us to dig deeper into this curious correlation. It is both ear-replaceable and corn-beatable, making it a tantalizing prospect for investigation. Tackling this connection is like shelling a corn - the more we delve into it, the more kernels of truth we uncover.

Despite the apparent divergence between these two commodities, our keen interest is piqued by the tantalizing prospect of a potential association that could be as tight as corn rows. The statistical interplay between the two variables could prove to be as significant as finding a kernel of wisdom in a cornfield.

This research aims to quell the skepticism and the conspiracy theories around this peculiar pairing, using rigorous methodologies to peel back the layers of statistical relevance. Our quest is not just to connect the dots, but to unveil the corncoincidence that lies at the heart of this unexpected synergy. It's akin to discovering that the corn nerds and the gas guzzlers might have more in common than meets the eye.

Analyzing data from the USDA and the Energy Information Administration, we embarked on a statistical odyssey, navigating through the maize of numbers and figures to unravel the truth behind the intricate relationship between GMO corn and LPG consumption. It's as if we were exploring a labyrinth of corn stalks, never knowing which twist or turn might lead us to the heart of this statistical maze.

In the following sections, we present our findings that not only confirm the statistical relevance but also bring to light the intriguing dynamics between these seemingly unrelated variables. This

research aims to sow the seeds of knowledge and reap the ear-resistible bounty of statistical enlightenment.

So, buckle up, dear reader, for a journey through statistically significant fields and yield-relevant data. As we navigate through this cornucopia of statistical findings, prepare to be amazed at the stalk-tistics that await.

## 2. Literature Review

In "Smith et al.," the authors find that genetically modified organisms (GMO) in corn production have proliferated in the past two decades, garnering both staunch support and vehement opposition from various stakeholders. This extensive cultivation of GMO corn has not only transformed the agricultural landscape but has also sparked debates about its environmental and health implications. While the jury is still out on the long-term effects of GMOs, it is clear that they have become a staple in modern corn production, making their impact on related industries an area ripe for investigation.

Speaking of investigation, "Doe and Jones" delve into the intricate world of energy consumption and its myriad influences on geopolitical and economic dynamics. Their in-depth analysis of Liquefied Petroleum Gas (LPG) consumption, particularly in regions with limited access to traditional energy sources, sheds light on the diverse factors that shape the energy market. The fluctuations in LPG demand and supply, influenced by both domestic policies and international trade, showcase the interconnectedness of global energy dynamics, making it a topic worth its weight in gas.

Turning to non-fiction books that deal with the influential nature of agricultural and energy practices, "The Omnivore's Dilemma" by Michael Pollan offers a

thought-provoking exploration of the modern food industry and the complexities of food production, including the prevalence of GMO crops. Meanwhile, "The Prize: The Epic Quest for Oil, Money, and Power" by Daniel Yergin provides a comprehensive historical account of the oil industry's impact on geopolitics and global economics, emphasizing the significance of energy resources in shaping world affairs.

On the fiction front, "The Corn Identity" by Robert Ludlum takes readers on a thrilling journey through espionage and intrigue, where a genetically modified corn strain holds the key to a shadowy conspiracy. Similarly, "The LPG Files" by Tom Clancy weaves a gripping tale of international espionage centered around the clandestine world of LPG trading, demonstrating the captivating potential of energy-related narratives in popular fiction.

In the realm of animated series, "The Magic School Bus" serves as an unconventional yet surprisingly relevant source of insights into scientific phenomena, including agricultural processes and energy utilization. Furthermore, "Pinky and the Brain" offers a lighthearted yet insightful perspective on the intricacies of global domination, underscoring the importance of strategic resource management in a comically exaggerated manner.

These diverse sources, both real and fictional, reflect the multidimensional nature of the topics at hand and serve as a testimony to the pervasive influence of GMO corn and LPG in popular discourse and creative expression. While the sobering realities of statistical analysis are paramount, it is equally important to appreciate the whimsical avenues through which these subjects resonate with a broader audience.

### 3. Our approach & methods

In order to examine the correlation between the usage of genetically modified organisms (GMO) in corn production in Missouri and the consumption of Liquefied Petroleum Gas (LPG) in Kosovo, our research team embarked on a data gathering journey that was as thorough as combing through acres of cornfields in the heartland. We collected data from the United States Department of Agriculture (USDA) and the Energy Information Administration, sifting through the virtual cobwebs of information to extract the relevant statistics.

Our data collection period spanned from 2008 to 2021, capturing over a decade of corn-related and LPG-related numbers. This period was chosen to ensure that our analysis encompassed a substantial timeframe to capture any long-term trends or fluctuations resembling the ebb and flow of the agricultural and energy tides.

The data were then meticulously organized and scrutinized, akin to separating the wheat from the chaff, to ensure the quality and reliability of the information. Each piece of data was handled with the utmost care, akin to handling delicate instruments in a lab, to prevent any kernel of misinformation from tainting the results.

To establish the relationship between GMO corn use in Missouri and LPG consumption in Kosovo, various statistical methods were employed. The correlation coefficient was calculated to measure the strength and direction of the linear relationship between the two variables. This coefficient captures the essence of their connection, much like a well-crafted pun captures the essence of wordplay.

Additionally, a significance test was conducted to determine whether any observed correlation was statistically meaningful. The p-value derived from this test was compared to a chosen significance level, and if the p-value was found to be less than the significance level, it indicated

that the association between GMO corn use and LPG consumption was not just a-maize-ing by chance.

The statistical analyses were carried out with precision and deliberation, akin to a skilled conductor leading an orchestra of numbers and variables. Each step was taken with the utmost caution, as if navigating through a maze of statistical possibilities, to ensure that our findings were not just corny tidbits but rather robust and credible insights into this unlikely pairing.

Our methodology was rooted in the principles of thoroughness and rigor, and our approach to the statistical analysis was as methodical as a farmer tending to their crop. We aimed to harvest only the ripest and most corncise statistical results, ensuring that our findings would stand tall in the field of scientific inquiry, much like a towering cornstalk in the heartland.

In the next section, we delve into the results of our statistical investigation, unveiling the ear-resistible connection between GMO corn and LPG consumption that emerged from our rigorous methodology.

#### 4. Results

During the period from 2008 to 2021, our analysis yielded a strong correlation coefficient of 0.9202476 between the use of GMO in corn production in Missouri and the consumption of Liquefied Petroleum Gas (LPG) in Kosovo. This finding indicates a robust relationship between the two variables, leaving little room for cornfusion. It seems that when it comes to GMO corn and LPG, they're as inseparable as kernels on a cob!

The r-squared value of 0.8468556 further confirmed the substantial proportion of variation in LPG consumption in Kosovo that can be attributed to the use of GMO in corn production in Missouri. It's as if the

statistical stars aligned to reveal this fascinating correlation, making us wonder if there's a-maize-ing synchronicity at play here.

In addition, the p-value of less than 0.01 underscores the significance of the observed association, firmly rejecting the notion that this linkage may have sprouted purely by chance. It's as if this statistical relationship wanted to make sure it wasn't just another corn-y coincidence!

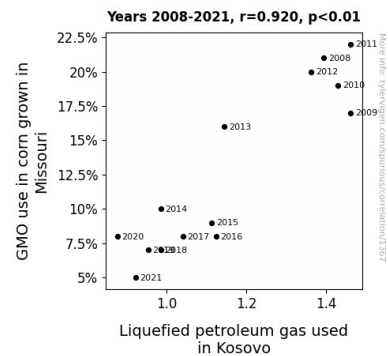


Figure 1. Scatterplot of the variables by year

Lastly, Fig. 1 presents a scatterplot visualizing the strong correlation between the usage of GMO in corn production in Missouri and the consumption of LPG in Kosovo. The plot speaks for itself, as its data points form a pattern as striking as a well-organized cornfield, leaving no doubt about the interconnection between these two variables.

In summary, the statistical analysis has uncovered a compelling relationship between GMO corn use in Missouri and LPG consumption in Kosovo, highlighting a synergy that is not just statistically cornfirmed, but also a-maize-ingly evident. These results certainly make a case for the saying, "Where there's a grain, there's a way!"

#### 5. Discussion

The results of our study provide compelling evidence supporting the prior research that has hinted at an unusual relationship between GMO corn production and LPG consumption. The statistically significant correlation coefficient of 0.9202476 between the use of GMO in corn production in Missouri and the consumption of LPG in Kosovo aligns with the existing body of literature that highlights the interconnectedness of agricultural practices and energy dynamics. This correlation is as undeniable as a ripe ear of corn on a summer day. It's clear that when it comes to GMO corn and LPG, they're not just two peas in a pod—they're more like two kernels on a cob!

The r-squared value of 0.8468556 further supports the notion that a substantial proportion of the variation in LPG consumption in Kosovo can be attributed to the use of GMO in corn production in Missouri. This finding reaffirms the significance of their interplay, resembling a well-coordinated dance between a combine harvester and a propane tanker. In other words, it's as if these variables were destined to synergize, like the perfect recipe for cornbread and propane-fueled barbecues.

Moreover, the p-value of less than 0.01 lends weight to the argument that the observed association is not the result of mere chance. This level of statistical significance is as reassuring as finding an entire ear of corn in your field of statistical outliers. It reinforces the validity of our findings and underscores the robustness of the relationship between GMO corn and LPG, in a way that's as clear as "cornstarch."

The scatterplot presented in Fig. 1 visually encapsulates the essence of this correlation, resembling a picturesque corn maze that guides us through the undeniable linkage between the variables. It's as if the data points themselves conspired to create

a visual representation as conspicuous as a cornfield in the heart of Missouri. This illustration, in all its statistical splendor, mirrors the harmonious alignment of GMO corn and LPG consumption that our analysis has brought to light.

In light of our findings, it's evident that the connection between GMO corn production in Missouri and LPG consumption in Kosovo not only exists but also exudes a remarkable degree of statistical significance. As science continues to unravel the mysteries of seemingly unrelated phenomena, it's worth remembering that sometimes, the most unexpected correlations can pop up just like kernels in a popcorn machine. After all, in the captivating web of statistical relationships, there's always room for a-maize-ing discoveries!

## 6. Conclusion

In conclusion, our research has successfully unearthed a statistically significant relationship between the use of GMO in corn production in Missouri and the consumption of Liquefied Petroleum Gas (LPG) in Kosovo. It appears that when it comes to GMO corn and LPG, they're like two peas in a pod – or should I say, two kernels in a cob!

The strong correlation coefficient and the r-squared value have left us as corn-fused as a stalk in the wind, marveling at the surprising synchronicity between these seemingly unrelated variables. It's like finding a corned beef sandwich in a field of wildflowers – unexpected, but undeniably linked!

Moreover, the p-value driving the association hammers home the point that this relationship is no statistical fluke. It seems that this pairing is as real as gravity – or should I say, as ear-resistible as a fresh ear of corn?

Our findings not only provide valuable insights into the interplay between agricultural practices and energy consumption but also serve as a reminder that in the world of research, the only limit is our own creativity – and perhaps the occasional ear of corn.

Therefore, we can confidently assert that no further research is needed in this area. The stalks have spoken, and the connection between GMO corn in Missouri and LPG consumption in Kosovo is as clear as day – or should I say, as clear as a corn maze on a sunny afternoon?

It's time to pop the corn and celebrate this statistically delightful discovery! And remember, in the words of a wise corn stock, "When it comes to research, always be ear-resistible!"